

Cont
F=1
SUB
G.1.7

subjecting the dielectric film to a wet oxidation with steam process to raise the oxygen content of said dielectric film provided by heating a mixture of hydrogen and oxygen gases in a rapid thermal process chamber at a temperature greater than about 450 °C, wherein said mixture is a ratio from approximately 0.1 to approximately 0.80 of hydrogen gas to oxygen gas, and wherein the pressure of said rapid thermal process chamber is less than atmospheric pressure.

F2

41. (Three Times Amended) A method of fabricating a semiconductor device, the method comprising:

depositing a dielectric film with a thickness greater than about 40 Angstroms over a semiconductor substrate; and

subjecting the dielectric film to a wet oxidation with steam process to raise the oxygen content of said dielectric film in a rapid thermal process chamber at a temperature greater than about 450 °C, said steam provided in a ratio of at least 0.005 relative to other gases present in the rapid thermal process chamber, wherein the pressure of said rapid thermal process chamber is less than atmospheric pressure.

F3

42. (Twice Amended) A method of fabricating a semiconductor device, the method comprising:

depositing a dielectric film over a semiconductor substrate to form one of a gate and a capacitor dielectric; and

subjecting the dielectric film to a wet oxidation with steam process to raise the oxygen content of said dielectric film provided by heating a mixture of hydrogen and oxygen gases in a rapid thermal process chamber at a temperature greater than about 450 °C, wherein said mixture is a ratio from approximately 0.1 to approximately 0.80 of

hydrogen gas to oxygen gas, and wherein the pressure of said rapid thermal process chamber is less than atmospheric pressure.

43. (Amended) A method of fabricating a semiconductor device, the method comprising:

depositing a dielectric film over an active region of a semiconductor substrate to form part of a gate of a transistor; and

subjecting the dielectric film to a wet oxidation with steam process to raise the oxygen content of said dielectric film provided by heating a mixture of hydrogen and oxygen gases in a rapid thermal process chamber at a temperature greater than about 450 °C, said mixture is a ratio from approximately 0.1 to approximately 0.80 of hydrogen gas to oxygen gas, wherein said steam is provided in a ratio of at least 0.005 relative to other gases present in the rapid thermal process chamber, and wherein the pressure of said rapid thermal process chamber is less than atmospheric pressure.